

ART. 16.—*Descriptions of New Zealand Lepidoptera.*

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THE whole of the new species following were received from my friend Mr. G. V. Hudson; they include some forms of special interest, and some unique specimens which he has very generously placed at my service.

CRAMBIDAE.

Diptychophora planetopa n. sp.

♂. 11 mm. Head whitish-ochreous mixed with grey. Palpi grey with ochreous-yellowish median spot, towards base whitish. Thorax dark grey, patagia pale ochreous with a dark-grey stripe. Abdomen rather dark grey. Forewings triangular, termen slightly bisinuate; dark fuscous, somewhat mixed with whitish-ochreous in disc; anterior half of costa suffused with whitish-ochreous; first line rather thick, irregular, whitish-ochreous on upper half and white on lower, edged with cloudy dark-fuscous lines, angulated outwards in middle and inwards towards dorsum, preceded by a fascia of whitish-ochreous suffusion marked with white below middle; a rather large round snow-white discal spot beyond middle, above which is a white dot; second line fine, white, interrupted into minute lunules, excurved from near costa to below middle; a white dot near apex; a terminal series of six rather cloudy black triangular spots, preceded by a series of irregular brownish-ochreous spots, at apex an elongate brownish-ochreous spot, a minute white mark beneath uppermost black spot: cilia dark grey, with fine indistinct whitish basal and median lines, and indistinct slender whitish bars beneath apex, in middle, and above tornus. Hindwings rather dark grey; cilia light grey with whitish median and apical shades.

Routeburn Valley, Lake Wakatipu, in forest, February; one example. Very distinct.

PYRAUSTIDAE.

Scoparia zophochlaena n. sp.

♂. 18 mm. Head ferruginous-ochreous, face fuscous. Palpi $2\frac{1}{4}$, light grey mixed with whitish. Antennal ciliations $\frac{1}{4}$. Thorax dark fuscous. Abdomen ochreous-grey-whitish, anal tuft whitish-ochreous. Forewings elongate-triangular, termen gently rounded, faintly sinuate beneath apex, somewhat oblique; light ochreous-brownish; first line double, irregular, white, from $\frac{1}{5}$ of costa to $\frac{1}{3}$ of dorsum, suffusedly blotched with ferruginous-ochreous above and below middle, basal area within this almost wholly black; second line fine, white, from $\frac{4}{5}$ of costa to $\frac{3}{4}$ of dorsum, gently excurved, indented at $\frac{1}{4}$ from costa, nearly preceded by a more curved fascia of whitish suffusion broadest towards extremities, space between these blackish towards costa; space between first line and the whitish fascia forming a trapezoidal costal blotch of blackish suffusion, its anterior lower angle resting on dorsum beyond first line and posterior on middle of fascia; second line followed by a blackish transverse blotch from costa hardly reaching half across wing, and some irregular blackish marking

towards dorsum; an almost terminal series of small roundish spots of blackish irroration: cilia whitish-grey, with grey subbasal shade. Hindwings ochreous-whitish, with an apical blotch of light-grey suffusion; cilia whitish, with grey subbasal line.

Takapuna, Auckland, in January; one example. Conspicuous by the large development of black blotches; probably most allied to *acharis*.

TORTRICIDAE.

Epichorista emphanes Meyr.

On the 21st December, 1920, Mr. Hudson found this species abundant at Gollan's Valley, Wellington, in company with *Harmologa achrosta* Meyr., and observed that all examples of *emphanes* were ♀ and all *achrosta* ♂, and also took a pair *in cop.*; he therefore concluded that these forms are sexes of the same species, and this is undoubtedly correct, being borne out by examination of the series in his collection. The two forms are so different in appearance that I should not have suspected their identity, never having met with them alive myself. This discovery further called my attention to the fact that the genus *Harmologa*, originally based on a few species, has now through considerable accretions become heterogeneous and requires subdivision. I therefore reclassify this group of species as under:—

Gelophaula n. g.

Antennae in ♂ stout, simple, or very minutely pubescent. Palpi long, porrected, clothed with dense rough scales diminishing to apex, beneath with long rough hairs towards base, in ♀ less developed. Thorax without crest. Forewings 7 and 8 separate, 7 to termen. Hindwings without cubital pecten, 3-5 approximated at base, 6 and 7 closely approximated at base or short-stalked.

Type, *trisulca* Meyr. Includes also *aenea* Butl., *tritochlora* Meyr., *tributaria* Philp., *siraea* Meyr., *lychnophanes* Meyr., *palliata* Philp., *brevicula* Meyr.

Epichorista Meyr.

Antennae in ♂ moderately or rather strongly ciliated. Palpi moderate or long, porrected, second joint dilated with dense scales above and beneath. Thorax without crest. Forewings 7 and 8 separate, 7 to termen. Hindwings without cubital pecten, 3-5 approximated at base, 6 and 7 closely approximated at base or short-stalked.

Type, *hemionana* Meyr. Includes also *elephantina* Meyr., *persecta* Meyr., *tenebrosa* Philp. (not seen), *siriana* Meyr., *aspistana* Meyr., *eribola* Meyr., *zatrophana* Meyr., *emphanes* Meyr. (= *achrosta* Meyr.), *allogama* Meyr., *crypsidora* Meyr.

Harmologa Meyr.

Antennae in ♂ moderately or rather strongly ciliated. Palpi moderate or long, porrected, second joint dilated with dense scales above and beneath. Thorax with small posterior crest. Forewings 7 and 8 separate, 7 to termen. Hindwings without cubital pecten, 3-5 approximated at base, 6 and 7 closely approximated at base or short-stalked.

Type, *oblongana* Walk. Includes also *amplexana* Zell., *scoliastis* Meyr., *antitypa* Meyr., *sisyrana* Meyr., *pontifica* Meyr., *sanguinea* Philp., *festiva* Philp.

Philocryptica n. g.

Antennae in ♂ rather strongly ciliated. Palpi rather short, obliquely ascending, second joint with tolerably appressed scales. Thorax with strong double posterior crest. Forewings 7 and 8 separate, 7 to termen. Hindwings without cubital pecten, 3 approximated at base to 4, 4 and 5 short-stalked, 6 and 7 stalked.

Type, *polypodii* Watt, for an example of which I am indebted to Mr. Hudson.

Ecclitica n. g.

Antennae in ♂ strongly fasciculate-ciliated. Palpi rather short, sub-ascending, second joint with short rough scales appressed towards base. Thorax with strong double posterior crest. Forewings 7 and 8 separate, 7 to termen. Hindwings without cubital pecten, 3 and 4 closely approximated at base or almost connate, 5 little approximated, 6 and 7 stalked.

Type, *hemiclista* Meyr. Includes also the following new species:—

Ecclitica incendiaria n. sp.

♂. 14 mm. Head and palpi fuscous. Antennal ciliations 2. Thorax dark purplish-fuscous somewhat mixed with ferruginous. Abdomen dark grey. Forewings rather elongate-triangular, costa slightly arched, with moderate fold from base to beyond $\frac{1}{3}$, apex obtuse, termen somewhat rounded, rather oblique; ashy-grey, with faint violet tinge; costal fold dark fuscous with three pale-ochreous spots; dorsal area on basal third irregularly marked with dark fuscous and mixed with ferruginous; central fascia oblique, irregular-edged, dark fuscous, costal third very narrow, remainder broad but containing several small grey or ferruginous spots and marked on dorsal edge with three small white spots; costal edge on posterior half whitish between dark markings; two small dark-fuscous spots on costa beyond central fascia, whence slender ferruginous streaks mixed with dark fuscous run into broad part of fascia; two transverse ferruginous spots on costa about $\frac{2}{3}$, blackish on costa, confluent and mixed with blackish beneath, connected beneath with a median prominence of a blackish streak running from costa near apex to tornus, edged in front with slight ferruginous suffusion, dorsal edge white before this; some dark-fuscous strigulation along termen: cilia dark fuscous, tips somewhat mixed with brownish. Hindwings dark grey; cilia grey, with dark-grey subbasal line.

Mount Egmont, 4,000 ft., February; one example.

EUCOSMIDAE.

Spilonota macropetana Meyr., *Proc. Linn. Soc. N.S.W.*, vol. 6, p. 683, 1881.

Auckland, from *Eucalyptus*; one ♂ example received by Mr. Hudson from the Department of Agriculture. Not previously noticed from New Zealand; the species is a native of Australia, where it is common and widely distributed, and has doubtless been artificially introduced with *Eucalyptus*, which is its food-plant.

GELECHIADAE.

Sitotroga cerealella Ol., *Staud. Cat. Pal. Lep.*, No. 2902; Meyr., *Proc. Linn. Soc. N.S.W.*, vol. 29, p. 286, 1904.

Levin, December; one example received by Mr. Hudson from the Department of Agriculture. Apparently not previously recorded from New

Zealand, but I am surprised it has not been found earlier; it is generally spread in all countries not too cold as a pest of stored grain (wheat, rice, &c.), to which the larva is very destructive; it is abundant in Australia. It may be looked for in corn-bins and granaries. The full synonymy and list of references is considerable.

Apatetris melanombra Meyr.

Having received an example of *Gelechia sparsa* Philp. from Mr. Hudson, I find it to be a synonym of this species. The genus *Apatetris* Staud. I have adopted as superseding *Epiphthora* Meyr.

OECOPHORIDAE.

Chersadaula n. g.

Head loosely haired; ocelli posterior; tongue developed. Antennae $\frac{3}{4}$, in ♂ evenly ciliated, basal joint moderate, without pecten. Labial palpi rather long, recurved, second joint thickened with appressed scales, terminal joint about half second, slender, acute. Maxillary palpi very short, filiform. Posterior tibiae rough-scaled above. Forewings 1b furcate, 2 and 3 stalked from angle, 7 and 8 stalked, 7 to costa, 11 from middle; in ♀ half-aborted, pointed. Hindwings in ♂ 1, elongate-ovate, cilia $\frac{3}{4}$; 3 and 4 connate, 5-7 nearly parallel; in ♀ half-aborted, very short, lanceolate.

An interesting development of *Borkhausenia*.

Chersadaula ochrogastra n. sp.

♂. 17 mm. Head ochreous-whitish, hairs greyish towards base. Palpi ochreous-whitish mixed with grey. Antennal ciliations ♂ $1\frac{1}{2}$. Thorax ochreous-whitish slightly tinged with rosy, and suffusedly mixed with grey. Abdomen light yellow-ochreous. Forewings elongate, costa slightly arched, apex obtuse, termen very obliquely rounded; light-brownish irregularly tinged with rosy-pink, and sprinkled with grey-whitish and dark fuscous; a dark-fuscous dot on base of costa; a spot of dark-fuscous irroration in disc towards base; stigmata roundish, dark fuscous, plical beneath first discal, opposite spots of dark-fuscous suffusion on costa and dorsum before these two and suffusedly connected with them, plical preceded by some white suffusion, a roundish blotch of dark-fuscous irroration between second discal and tornus, preceded by narrow whitish suffusion; an irregular ill-defined and incomplete angulated subterminal line of dark-fuscous irroration, indented above angle: cilia pale ochreous tinged with rosy, base sprinkled with dark fuscous. Hindwings dark grey, lighter towards base; cilia grey.

♀. 16 mm. Abdomen yellow-ochreous, grey on sides and praeanal segment, anal segment whitish. Forewings broad-lanceolate, apex strongly and narrowly produced, pointed; colour and markings nearly as in ♂, but basal third more whitish, angularly prominent in disc, a stronger blackish mark between second discal and tornus. Hindwings rather broad-lanceolate, less than half length of forewings and about half as broad: cilia grey-whitish.

Breaker Bay, Wellington; bred in November from larvae found under stones on the coast in September; two examples. The female must be incapable of flight—probably an adaptation to a shelterless and windy coast.

Izatha manubriata n. sp.

♂. 26 mm. Head and thorax grey suffused with white except shoulders. Palpi white, second joint sprinkled with blackish, and with a black subapical

ring, terminal joint with black median band. Abdomen grey, segmental margins whitish, anal tuft ochreous-whitish. Forewings elongate, posteriorly rather dilated, costa slightly arched, apex obtuse, termen nearly straight, oblique; grey suffusedly irrorated with white, tinged here and there with ochreous; a small grey basal patch, edge sprinkled with blackish, acutely angulated on fold; small blackish spots on costa at $\frac{1}{5}$ and $\frac{3}{5}$; stigmata blackish, plical beneath first discal, second discal represented by a small transverse spot from which a blackish streak runs nearly to first, a blackish dot between and above first and second discal; an obscure angulated subterminal shade of whitish suffusion; a marginal series of small blackish-grey spots round posterior part of costa and termen: cilia whitish with two grey shades. Hindwings grey; cilia as in forewings.

Ben Lomond, Lake Wakatipu, in forest at 2,000 ft., January; one example.

Cryptolechia rhodobapta n. sp.

♂. 19 mm. Head and thorax rosy-fuscous. Palpi light rosy partially suffused with fuscous. Abdomen pale-greyish tinged laterally with rosy, anal tuft whitish-ochreous. Forewings elongate, moderate, costa moderately arched, apex obtuse, termen slightly rounded, somewhat oblique; 2-4 approximated, 7 to apex; rosy-lilac-brownish, costal edge ferruginous: stigmata small, indistinct, dark fuscous, plical beneath first discal; an obtusely angulated subterminal series of indistinct short interneural dark-fuscous dashes: cilia rosy mixed with light grey. Hindwings light grey; cilia light rosy.

Takapuna, Auckland, January; one example. Next to *liochoa*, which, however, has ochreous-whitish hindwings.

COPROMORPHIDAE.

Isonomeutis restincta n. sp.

♀. 12 mm. Head brownish, sides of crown sprinkled with whitish. Palpi brownish sprinkled with dark fuscous, towards base beneath and on upper edge sprinkled with whitish. Thorax brownish. Abdomen rather dark fuscous, mixed laterally with white and on edges of two basal segments. Forewings elongate, not dilated posteriorly, costa gently arched, apex obtuse, termen very obliquely rounded; whity-brownish, irregularly and coarsely sprinkled with dark fuscous; markings formed by suffused dark-fuscous irroration; a streak along basal $\frac{2}{5}$ of costa; a moderate median fascia angulated in middle, posterior edge of angulation with a stronger dark-fuscous mark: cilia pale-brownish, basal third sprinkled with whitish and marked with well-defined spots of dark-fuscous irroration. Hindwings 6 absent; pale-brownish speckled with fuscous; a transverse whitish spot on tornus, preceded and followed by dark-fuscous suffusion: cilia pale-brownish, with darker subbasal line, round tornus mixed at base with whitish and dark fuscous.

Kaeo, north of Auckland, January; one example. Distinct from *amauropa* by forewings not dilated posteriorly, and vein 6 of hindwings absent. Having carefully reconsidered this curious genus, I am confirmed in my latest view that it is correctly referred to the Copromorphidae, and also think there is some slight indication of affinity with the Orneodidae (not found in New Zealand), which are derived from the Copromorphidae.

HELIODINIDAE.

Stathmopoda coracodes n. sp.

♂. 13 mm. Head and thorax shining pale ochreous with violet-grey reflections, face pearly-whitish. Palpi whitish. Posterior tibiae densely clothed with rough grey hair-scales above and beneath, bristle-tuft at apex of first joint of tarsi rather large. Forewings very narrow, widest near base, pointed; rather dark violet-ashy-grey, dorsal area somewhat paler and bronzy-tinged; an elongate cloudy whitish dot below fold at $\frac{1}{4}$; a cloudy whitish dot towards termen at $\frac{4}{5}$ of wing: cilia grey. Hindwings dark grey; cilia grey.

Picton, December; one example. The posterior tibiae are more densely and roughly clothed than in *skelloni*; it is the darkest New Zealand species.

Stathmopoda mysteriastis Meyr.

I consider from the description that *seminuda* Philp. is a synonym of this.

COSMOPTERYGIDAE.

Batrachedra psathyra Meyr.

A fine pair (♂ ♀), sent by Mr. Hudson from Wellington, have the stigmata represented by elongate ochreous spots accompanied by some black scales, and a row of similar less-elongate spots along posterior half of costa, but am unable to separate them from others passing gradually to the less-developed type of marking.

ELACHISTIDAE.

Elachista ochroleuca n. sp.

♂. 10 mm. Head, palpi, thorax, and abdomen white. Forewings narrowly elongate-lanceolate, apex produced, acute; 4 and 8 absent; ochreous-white; an ochreous dot on fold towards extremity: cilia white. Hindwings linear-lanceolate; 4 absent; grey-whitish: cilia whitish.

Mount Aurum, 3,000 ft., amongst tussock-grass, January; one specimen.

GRACILARIADAE.

Acrocercops cyanospila Meyr.

A fine example sent by Mr. Hudson shows a projection of scattered black scales on dorsum of forewings about $\frac{1}{4}$, probably very easily lost, as it does not appear distinctly in any of my good series; two or three Indian allied species of the genus also have dorsal scale-projections.

Parectopa aellomacha Meyr.

I have no hesitation in affirming that the forms described by Mr. Watt in *Trans. N.Z. Inst.*, vol. 52, pp. 449–60, under the awkward names of *panacitorsens*, *panacivermiforma*, *panacicorticis*, and *panacifinens* are indistinguishable from this species, and these names can only be regarded as synonyms, the differences in larval habit (on the same food-plant) being merely varietal.

PLUTELLIDAE.

Cadmogenes n. g.

Head with appressed scales, side-tufts somewhat raised; ocelli posterior; tongue developed. Antennae $\frac{4}{5}$, basal joint elongate, without pecten.

Labial palpi long, recurved, second joint reaching base of antennae, thickened with appressed scales, terminal joint shorter than second, scaled, pointed. Maxillary palpi obsolete. Posterior tibiae smooth-scaled. Forewings 2 from angle, curved, 6-8 straight, slightly approximated towards base, 7 to costa, 9 and 10 somewhat approximated at base, 11 from middle. Hindwings 1, elongate-oblong-ovate, cilia $\frac{2}{3}$; 2 from rather near angle, 3 from angle, 4 rather approximated to 3 towards base, 5 parallel, transverse vein inwards-oblique from 4 to 5, 6 and 7 rather approximated towards base.

Belongs to group of *Orthenches*, from which genus it differs by terminal joint of labial palpi shorter than second, absence of maxillary palpi, and costal termination of vein 7 of forewings. This interesting form suggests some affinity with *Depressaria* and *Cryptolechia*, and may indicate the origin of the Oecophoridae from the Plutellidae, in which case it would be of high phylogenetic importance.

Cadmogenes literata n. sp.

♀. 15-17 mm. Head and thorax dull rosy or purple-fuscous. Palpi rosy irrorated with dark fuscous, tip whitish. Abdomen light-greyish. Forewings elongate, costa gently arched, apex obtuse-pointed, very slightly prominent, termen rounded, rather strongly oblique; dull crimson suffusedly speckled with dark grey and irregularly marbled and strigulated with pale ochreous-yellowish, or purple-fuscous obscurely dotted and strigulated with whitish; discal stigmata represented by irregular transverse-linear sometimes interrupted white partially dark-edged marks: cilia light rosy or violet-grey. Hindwings pale grey; cilia whitish-grey, with very faint rosy or purple tinge.

Silverstream (Upper Hutt) and Auckland, in January; two examples. These differ considerably in tone, but are certainly the same species.

Orthenches porphyritis Meyr.

I now regard *cuprea* Meyr. as only a variety of this; the species is extremely variable in markings and colouring; in some forms it displays all the colours of the rainbow, and is a beautiful insect. Mr. Hudson has bred it from *Phyllocladus alpinus*.

LYONETIADAE.

Erechthias indicans n. sp.

♀. 9 mm. Head white, sides of crown brown. Palpi fuscous, tip white. Thorax brown, with white dorsal stripe. Abdomen whitish. Forewings elongate-lanceolate, apex produced; brown irrorated with dark fuscous; an irregular white median stripe from base to $\frac{3}{5}$, broadest towards its middle, apex pointed; a narrow white dorsal stripe from base to tornus; rather thick irregular very oblique white streaks from costa at middle and $\frac{3}{4}$ almost to termen; a small round black apical spot preceded by a triangular white spot on costa: cilia whitish, round apex a median line of dark-fuscous points, a short subbasal similar line beneath apex, and one at base along termen. Hindwings and cilia whitish.

Wellington, January; one example. Near *exospila*, but smaller and darker, and distinct by the white dorsal stripe.

TINEIDAE.

Narycia Steph.

Head shortly rough-haired. Antennae $\frac{1}{2}$ – $\frac{3}{5}$, in ♂ ciliated. Labial palpi rather short, loosely scaled. Maxillary palpi obsolete. Forewings 7 and 8 stalked or coincident, 7 to apex or termen. Hindwings 1, elongate-ovate; 2–7 nearly parallel.

Largely represented in Australia, and also occurs widely in India and Africa, but not previously noticed from New Zealand. The larvae usually feed in portable cases on lichens.

Narycia petrodoxa n. sp.

♀. 21 mm. Head light greyish-ochreous, face and a spot on crown dark fuscous. Palpi dark fuscous. Thorax pale greyish-ochreous marked with dark fuscous (partly defaced). Abdomen rather dark grey. Forewings elongate, posteriorly slightly dilated, costa gently arched, apex obtuse-pointed, termen slightly rounded, rather strongly oblique; 7 and 8 stalked, 7 to termen; pale greyish-ochreous, with some scattered coarse dark-fuscous strigulae; markings dark purplish-fuscous; three small irregular spots on anterior half of costa; a transverse spot on middle of costa, connected by irregular or incomplete arms with quadrate spots on dorsum in middle and before tornus; three narrow transverse spots on posterior half of costa, a larger transverse spot from termen below middle: cilia rather dark purplish-fuscous. Hindwings dark grey; cilia grey.

Otira Gorge, 2,500 ft., in hot sunshine, December; one example. Quite of Australian type, but still very distinct from any species known to me.

MICROPTERYGIDAE.

Sabatinca passalota n. sp.

♂. 10 mm. Head and thorax golden-ochreous. Antennae dark fuscous, base ochreous. Abdomen dark fuscous. Forewings ovate-lanceolate, pointed nearly from middle; pale shining ochreous mostly suffused with coppery-golden; dark purple-grey elongate dots in disc at $\frac{2}{5}$ and middle, and a small elongate spot beneath and partly anterior to first; an almost marginal series of large dark purple-grey dots round posterior $\frac{2}{3}$ of costa and termen to an elongate mark on dorsum before middle of wing; some irregular whitish marginal spots adjoining these, a larger transverse one from costa at $\frac{3}{5}$: cilia pale golden-ochreous. Hindwings dark purple-grey; cilia pale ochreous tinged with grey towards base, on dorsum purplish-grey.

Bold Peak, Lake Wakatipu, 3,000 ft., amongst moss, January; one example. Forewings more long-pointed than in *chrysargyra*.

Micropardalis aurella Huds.

Described as *Sabatinca*, but is by neuration a true *Micropardalis*. The males of this species and of *M. doroxena* (of which I have also received additional examples from Mr. Hudson) agree also in having very large and curious genital valves of similar character, differing from those of any *Sabatinca*. The labial palpi, though short, are more developed in *doroxena* ♂ than in ♀, and the long maxillary palpi are also more largely developed. In *aurella* ♂ the labial palpi are very short, but perceptible.